Claim Status

Claims 1, 4, 5, 8, and 9 are presented for examination on the merits. Claims 1, 5, and 9 are the independent claims. Claim 12 has been cancelled, without prejudice to or disclaimer of the subject matter recited therein. Claims 1, 4, 5, 8, and 9 have been amended. It is respectfully submitted that _no_ new matter has been presented.

Claim Rejection

Claims 5 and 8 are rejected under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention.

Claims 1, 5, and 9 are rejected under 35 U.S.C. § 102(b) as being anticipated by Mo (U.S. Patent No. 6,084,689).

Claims 4, 8, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mo as applied to Claims 1, 5, and 9 above and in view of Moriyama (U.S. Patent No. 6,084,604).

The rationale underlying each of the rejections is succinctly set forth in the Office Action.

Response to §101 Rejection

Claims 5 and 8 are rejected under 35 U.S.C. § 101 as not falling within one of the four statutory categories of invention, as neither transforming the underlying statutory subject matter nor positively tying to another statutory category that accomplishes the claimed method steps.

Without conceding the propriety of the rejection and solely to advance prosecution, Claim 5 has been amended to recite various features of an apparatus used to accomplish the claimed method steps. As such, Applicant submits that the present invention as recited in

amended Claim 5, and dependent Claim 8, is positively tied to another statutory category that accomplishes the claimed method steps. Accordingly, Applicant submits that the rejection is moot.

Response to Art Rejections

Amended Claim 1 recites an image forming apparatus including a first determination unit configured to determine a type of an object contained in input data; a second determination unit configured to determine, in a case where the type of the object contained in the input data is determined by the first determination unit to be a text type or a graphic type, whether or not an amount of colorant of a specified color exceeds a first colorant amount when the specified color contained in the input data has been rasterized; a conversion unit configured to convert, when it is determined by the second determination unit that the amount of colorant of the specified color exceeds the first colorant amount, the specified color into a color with an amount of colorant that falls within the first colorant amount; a rasterizing unit configured to rasterize the text type or graphic type object contained in the input data with a color converted or not converted by the conversion unit, and rasterize an image type object contained in the input data without determination by the second determination unit and conversion by the conversion unit; and a processing unit. When the type of the object rasterized by the rasterizing unit is the graphic type and a fine line correction mode is not selected based on a user operation, the processing unit is configured to set an amount of colorant of the graphic type object to the first colorant amount. When the type of the object rasterized by said rasterizing unit is the graphic type and a fine line correction mode is selected based on a user operation, the processing unit is configured to set an amount of colorant of the graphic type object to the second colorant amount which is smaller

than the first colorant amount. When the type of the object rasterized by said rasterizing unit is the text or image type, the processing unit is configured to set an amount of colorant of the text or image type object to the first colorant amount independent of whether or not the fine line correction mode is selected based on the user operation.

Amended independent Claims 5 and 9 are method and computer program stored on a computer readable medium to execute an image forming method claims, respectively, formulated on the basis of Claim 1.

By virtue of the features of the claimed invention, the claimed invention prevents the scattering of colorant around a rasterized text type or graphic type object, thus allowing the contours of the text and graphic type objects to be formed sharply.

With regards to the anticipation rejection, <u>Mo</u> is relied on to disclose, *inter alia*, determining whether or not a toner application rate for an object contained in input data exceeds a predefined toner reduction rate if the type of the object is formed uniformly of a designated color. <u>Mo</u> discloses a situation compensation technique for color printing that compensates for the over or under reduction of colorant levels that can result from gray component replacement (GCR) or under color removal (UCR) techniques. According to Figs. 4A to 5, when the total amount of colorant exceeds a threshold (TAC), the composite gray component composed of YMC components is replaced with the black component, if possible and, respective color components except black are reduced so that the total amount of colorant does not exceed the threshold. <u>Mo</u>, however, does <u>not</u> disclose or suggest a determination unit configured to determine a type of an object contained in input data, as recognized by the Examiner at page 7 of the Office Action. It is respectfully submitted that <u>Mo</u> does <u>not</u> disclose all of claimed features

of the invention and, therefore, does not anticipate the claimed invention, as set forth in the currently amended claims.

With regards to the rejection under 35 U.S.C. § 103(a), Moriyama is relied on to disclose a determination unit which discriminates the type of object based upon an instruction contained in image data. Moriyama discloses determination is performed to determine whether black data is contained in received data in order to determine the black data should be developed with black ink or C, M and Y inks. Moriyama, however, fails to disclose or suggest a second determination unit configured to determine, in a case where the type of the object contained in the input data is determined by the first determination unit to be a text type or a graphic type, whether or not an amount of colorant of a specified color exceeds a first colorant amount when the specified color contained in the input data has been rasterized; and a conversion unit configured to convert, when it is determined by said second determination unit that the amount of colorant of the specified color exceeds the first colorant amount, the specified color into a color with an amount of colorant that falls within the first colorant amount, as recited in amended Claim 1.

In addition the claimed invention includes a rasterizing unit configured to rasterize the text type or graphic type object contained in the input data with a color converted or not converted by said conversion unit, and rasterize an image type object contained in the input data without determination by said second determination unit and conversion by said conversion unit, and a processing unit configured to set an amount of colorant of the object based on the object type and whether or not a fine line correction mode is selected. As described above, neither of the cited documents discloses the second determination unit, the conversion unit and the rasterizing unit because the cited inventions need not discriminate an object type and reduce colorant in accordance with the object type.

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Amended independent Claims 5 and 9 are method and computer-program stored on a computer-readable medium to execute an image forming method claims, respectively, that have been formulated on the basis of amended apparatus Claim 1. It is respectfully submitted that Mo and Moriyama, whether taken individually or collectively, fail to teach or suggest currently amended Claims 5 and 9, and are also allowable over Mo and Moriyama for at least the same reasons given above with respect to amended Claim 1.

Dependent Claims

Claims 4 and 8 are directly dependent from independent Claim 1 and 5, respectively, and are allowable by virtue of their dependency and in their own right for further defining the invention.

Information Disclosure Statement

Applicant filed an Information Disclosure (IDS) on June 10, 2009. The Examiner is kindly requested to show consideration of the cited information by returning an annotated copy of the Form PTO-1449 enclosed with the IDS with the next Office Action.
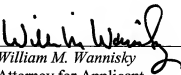
Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the pending claims are allowable over the art of record, and that the application is in condition for allowance.

Favorable reconsideration and early passage to issue of the application are earnestly solicited.

It is believed that <u>no</u> fee is fee is required for this Amendment. However, the

Commissioner is hereby authorized to charge any fee which may be deemed necessary in

connection with this paper to Deposit Account No. 06-1205.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by

telephone at (202) 530-1010. All correspondence should continue to be directed to our address

given below.

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Respectfully submitted,

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